



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/558,354	08/24/2006	Nigel Boughton-Smith	06275-479US I 101097-1P US	5761
26164 7590 03/18/2010 FISH & RICHARDSON P.C. P.O BOX 1022 MINNEAPOLIS, MN 55440-1022				
EXAMINER				
BLAKELY III, NELSON CLARENCE				
ART UNIT		PAPER NUMBER		
1614				
NOTIFICATION DATE		DELIVERY MODE		
03/18/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

### Office Action Summary

**Application No.**

10/558,354

**Applicant(s)**

BOUGHTON-SMITH, NIGEL

**Examiner**

NELSON C. BLAKELY III

**Art Unit**

1614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-17 and 20-23 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/200)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_

## **DETAILED ACTION**

### ***Application Status***

Claims 1-17 and 20-23 of the instant application are pending.

### ***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 12-17, drawn to a kit comprising a preparation of a first active ingredient which is a P2X<sub>7</sub> receptor antagonist which P2X<sub>7</sub> receptor antagonist is an adamantyl derivative, a preparation of a second active ingredient which is a tumor necrosis factor  $\alpha$  (TNF $\alpha$ ) inhibitor, and instructions for the simultaneous, sequential or separate administration of the preparations to a patient in need thereof.

Group II, claim(s) 1-11 and 20-23, drawn to a method of treating a patient comprising administering simultaneously, sequentially, or separately a therapeutically effective amount of a pharmaceutical product comprising, in combination, a preparation of a first active ingredient which is a P2X<sub>7</sub> receptor antagonist which P2X<sub>7</sub> receptor antagonist is an adamantyl derivative, a preparation of a second active ingredient which is a tumor necrosis factor  $\alpha$  (TNF $\alpha$ ) inhibitor.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

An international application should relate to only one invention, or if there is more than one invention, the inclusion of those inventions in one international application is only permitted if all inventions are so linked as to form a single general inventive concept (PCT Rule 13.1). With respect to a group of inventions claimed in an international application, unity of invention exists only when there is a technical relationship among the claimed inventions involving one or more of the same or corresponding special technical features.

The expression "special technical features" is defined in PCT Rule 13.2 as meaning those technical features that define a contribution which each of the inventions, considered as a whole, makes over the prior art. The determination is made on the contents of the claims as interpreted in light of the description and drawings (if any). Whether or not any particular technical feature makes a "contribution" over the prior art, and therefore constitutes a "special technical feature", should be considered with respect to novelty and inventive step.

The common technical feature in all groups is a combination comprising a preparation of a first active ingredient which is a P2X<sub>7</sub> receptor antagonist which P2X<sub>7</sub> receptor antagonist is an adamantyl derivative and a preparation of a second active ingredient which is a tumor necrosis factor  $\alpha$  (TNF $\alpha$ ) inhibitor. This composition cannot be a special technical feature under PCT Rule 13.2 because the composition is shown in the prior art.

Duplantier (European Patent Application No. 1310493A1; cited by Applicant) discloses, in the Abstract, *N*-adamantylalkyl benzylamide derivatives of formula I (P2X<sub>7</sub> receptor antagonist; see Title), process for their preparation, intermediates useful in their preparation, pharmaceutical compositions containing them, and their use in the treatment of inflammation, osteoarthritis, rheumatoid arthritis, etc. Further, in paragraph [0100], Duplantier discloses that in the treatment of rheumatoid arthritis, for example, the compounds of the reference invention may be combined with agents such as TNF- $\alpha$  inhibitors, e.g., D<sub>2</sub>E<sub>7</sub>, an anti-TNF monoclonal antibody. Thus, there is no “special technical feature”, which renders this restriction requirement proper.

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows: a disclosed P2X<sub>7</sub> receptor antagonist, a disclosed tumor necrosis factor  $\alpha$  (TNF $\alpha$ ) inhibitor and a disclosed inflammatory disorder.

With regard to Groups I and II, Applicant is required to elect a disclosed P2X<sub>7</sub> receptor antagonist and a disclosed tumor necrosis factor  $\alpha$  (TNF $\alpha$ ) inhibitor. In order for this election to be considered fully responsive to this requirement the election **must include:**

- a) the chemical name and structure of one species of the instantly claimed compound;
- b) the location of the species (a) within the claims or (b) within the specification;
- c) the claims that read on the elected species; and

d) a definition of the exact substitutions, e.g. R<sup>1a</sup> is hydrogen, etc...

With regard to Group II, Applicant is required to elect a disclosed inflammatory disorder.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

- a) a disclosed P2X<sub>7</sub> receptor antagonist – Instant claims 1-17 and 20-23;
- b) a disclosed tumor necrosis factor  $\alpha$  (TNF $\alpha$ ) inhibitor – Instant claims 1-17 and 20-23; and
- c) a disclosed inflammatory disorder – Instant claims 1-11 and 20-23.

The following claim(s) are generic: 1-17 and 20-23.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

An international application should relate to only one invention or, if there is more than one invention, the inclusion of those inventions in one international application is only permitted if all inventions are so linked as to form a single general inventive concept (PCT Rule 13.1). With respect to the species, unity of invention exists only when there is a technical relationship among the claimed inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.

The claims herein lack unity of invention under PCT Rule 13.1 and 13.2 because the instant invention does not set forth a technical relationship among the claimed inventions. For instance, the instant invention lacks unity in that the R<sup>4a</sup> substituents, as set forth in instant claim 2 (e.g. 3-membered saturated aliphatic heterocyclic ring system; 9-membered unsaturated aliphatic heterocyclic ring system), do not share a technical relationship, such as common biological, physical, or chemical properties. Therefore, with compositions comprising components of varying structural moieties, such as those claimed in instant claim 2, there is not a technical relationship among the claimed inventions.

Further, Applicant's broad claim to a method of treating an inflammatory disorder encompasses disorders that have varying mechanisms of action, e.g., acne vulgaris and glomerulonephritis. Therefore, a technical relationship does not exist.

Applicant is advised that to be complete, the reply to this requirement must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

The Examiner has required restriction between product and process claims. Where Applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition



against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

### ***Conclusion***

Claims 1-17 and 20-23 are subject to a restriction/election of species requirement.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NELSON C. BLAKELY III whose telephone number is (571) 270-3290. The examiner can normally be reached on Mon - Thurs, 7:00 am - 5:30 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on (571) 272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. C. B. III/  
Examiner, Art Unit 1614

/Ardin Marschel/  
Supervisory Patent Examiner, Art Unit 1614